CLAIMS

1. A file processing method comprising:
a compressing step which divides a file into a
plurality of sections and compresses each section of
the file using a plurality of compression
parameters; and
    a storing step which stores a compressed file
in a storage medium.

2. The file processing method as claimed
in claim 1, wherein said compressing step uses the
plurality of compression parameters based on a
distribution of an appearing frequency for each word
within said file.

3. The file processing method as claimed
in claim 1, wherein said compressing step includes a
flag which indicates non-compressed data in control
information of a certain section, if data in the
concerned section has a larger amount of information
in a form of compressed data than the non-compressed
data.

4. The file processing method as claimed
in claim 1, wherein said compressing step includes
identification information of the compression
parameters in control information of each section.

5. The file processing method as claimed
in claim 1, wherein said compressing step adds end
information which indicates an end of a section to
an end of each section, adds the end information to
only a last section when the sections have a fixed
length, and includes a flag indicating that the end
information is deleted in the control information of
the sections other than the last section.

6.    The file processing method as claimed in claim 1, further comprising:

a step which expands the compressed file which

5    is read from the storage medium by a driver software which is independent of an application software of a computer.

7.    A data processing apparatus

10    comprising:

a compressing process section which divides a file into a plurality of sections and compresses each section of the file using a plurality of compression parameters; and

15    a storing process section which stores a compressed file in a storage medium.

8.    The data processing apparatus as claimed in claim 7, wherein said compressing process

20    section uses the plurality of compression parameters based on a distribution of an appearing frequency for each word within said file.

9.    The data processing apparatus as

25    claimed in claim 7, wherein said compressing process section includes a flag which indicates non-compressed data in control information of a certain section, if data in the concerned section has a larger amount of information in a form of compressed

30    data than the non-compressed data.

10.    The data processing apparatus as claimed in claim 7, wherein said compressing process section includes identification information of the

35    compression parameters in control information of each section.

11.   The data processing apparatus as claimed in claim 7, wherein said compressing process section adds end information which indicates an end of a section to an end of each section, adds the end

5   information to only a last section when the sections have a fixed length, and includes a flag indicating that the end information is deleted in the control information of the sections other than the last section.

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12.   The data processing apparatus as claimed in claim 7, further comprising:

an expanding process section which expands the compressed file which is read from the storage

15   medium by a driver software which is independent of an application software of a computer.

13.   A storage medium which stores computer-readable information, and stores a program

20   comprising:

compressing process means for causing a computer to divide a file into a plurality of sections and compress each section of the file using a plurality of compression parameters; and

25      storing process means for causing the computer to store a compressed file in storage means.

14.   The storage medium as claimed in claim 13, wherein said compressing process means

30   causes the computer to use the plurality of compression parameters based on a distribution of an appearing frequency for each word within said file.

15.   The storage medium as claimed in

35   claim 13, wherein said compressing process means causes the computer to include a flag which indicates non-compressed data in control information

of a certain section, if data in the concerned section has a larger amount of information in a form of compressed data than the non-compressed data.

5          16.   The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to include identification information of the compression parameters. in control information of each section.

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           17.   The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to add end information which indicates an end of a section to an end of each

15     section, add the end information to only a last section when the sections have a fixed length, and include a flag indicating that the end information is deleted in the control information of the sections other than the last section.

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           18.   The storage medium as claimed in claim 13, wherein the program further comprising:
           expanding process means which causes the computer to expand the compressed file which is read

25     from the storage means by a driver software which is independent of an application software of the computer.

           19.   A storage medium which stores

30     computer-readable information, comprising:
           a region storing a file which is divided into a plurality of sections which are compressed using a plurality of compression parameters; and
           a region storing the compression parameters.

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           20.   The storage medium as claimed in claim 19, wherein said compression parameters are

based on a distribution of appearing frequency of an appearing frequency for each word within said file.

21. The storage medium as claimed in
5   claim 19, wherein a flag which indicates non-compressed data is included in control information of a certain section, if data in the concerned section has a larger amount of information in a form of compressed data than the non-compressed data.
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22. The storage medium as claimed in claim 19, wherein identification information of the compression parameters is included in control information of each section.
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23. The storage medium as claimed in claim 19, wherein end information which indicates an end of a section is added to an end of each section, the end information is added to only a last section
20   when the sections have a fixed length, and a flag indicating that the end information is deleted is included in the control information of the sections other than the last section.

25              24. The storage medium as claimed in claim 19, further storing:
      a driver software independent of an application software of a computer,
      said driver software including a program
30   provided with expanding process means for causing the computer to expand the compressed file which is read from the storage medium.

25. A file processing method comprising:
35       a reading step which accesses a storage medium which stores a plurality of compression parameters and a compressed file, an original file being

divided into a plurality of sections and compressed
for each section using the plurality of compression
parameters so as to obtain a plurality of section
data forming the compressed file; and

5      an expanding step which expands the section
data read from the storage medium by said reading
step using the compression parameters corresponding
to the section data.

10        26. The file processing method as claimed
in claim 25, wherein the plurality of compression
parameters are created based on a distribution of an
appearing frequency for each word within said
original file.

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        27. The file processing method as claimed
in claim 25, wherein the compressed file further
includes non-compressed section data of a certain
section and a non-compression flag which indicates

20   that the certain section is non-compressed, and said
expanding step suppresses expansion of the certain
section when the non-compression flag indicates a
non-compressed state of the section data of the
certain section read from the storage medium by said

25   reading step.

        28. The file processing method as claimed
in claim 25, wherein identification information of
the compression parameters is included in control

30   information of each section.

        29. The file processing method as claimed
in claim 25, wherein a delete flag which indicates
that end information indicating an end of each

35   section is not added to the section data is included
in control information of each section, and said
reading step reads the section data by judging a

last section based on the delete flag.

30.   The file processing method as claimed
in claim 25, wherein said expanding step is carried
5    out by a driver software for the storage medium,
said driver software being used for making access to
the storage medium.

31.   The file processing method as claimed
10   in claim 30, wherein the driver software for the
storage medium is independent of an application
software of the computer.

32.   A data processing apparatus
15   comprising:
a reading process section which controls an
access to a storage medium which stores a plurality
of compression parameters and a compressed file, an
original file being divided into a plurality of
20   sections and compressed for each section using the
plurality of compression parameters so as to obtain
a plurality of section data forming the compressed
file; and
an expanding process section which expands the
25   section data read from the storage medium by said
reading process section using the compression
parameters corresponding to the section data.

33.   The data processing apparatus as
30   claimed in claim 32, wherein the plurality of
compression parameters are created based on a
distribution of an appearing frequency for each word
within said original file.

34.   The data processing apparatus as
35   claimed in claim 32, wherein the compressed file
further includes non-compressed section data of a

certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding process section suppresses expansion of the certain section when the non-

5 compression flag indicates a non-compressed state of the section data of the certain section read from the storage medium by said reading process section.

35. The data processing apparatus as
10 claimed in claim 32, wherein identification information of the compression parameters is included in control information of each section.

36. The data processing apparatus as
15 claimed in claim 32, wherein a delete flag which indicates that end information indicating an end of each section is not added to the section data is included in control information of each section, and said reading process section controls reading of the
20 section data by judging a last section based on the delete flag.

37. The data processing apparatus as claimed in claim 32, wherein said expanding process
25 section carries out expansion by a driver software for the storage medium, said driver software being used for making access to the storage medium.

38. The data processing apparatus as
30 claimed in claim 37, wherein the driver software for the storage medium is independent of an application software of the data processing apparatus.

39. A data processing apparatus
35 comprising:
    a reading process section which controls an access to a storage medium which stores a plurality

of compression parameters and a compressed file in response to a read request from an application software, an original file being divided into a plurality of sections and compressed for each

5    section using the plurality of compression parameters so as to obtain a plurality of section data forming the compressed file; and
    an expanding process section which expands the section data read from the storage medium by said

10    reading process section using the compression parameters corresponding to the section data, and supplies expanded data to the application software.


    40.   A storage medium which stores

15    computer-readable information, and stores a program comprising:
    reading process means for causing a computer to control an access to a recording medium which stores a plurality of compression parameters and a

20    compressed file, an original file being divided into a plurality of sections and compressed for each section using the plurality of compression parameters so as to obtain a plurality of section data forming the compressed file; and

25    expanding process means for causing the computer to expand the section data read from the recording medium by said reading process section using the compression parameters corresponding to the section data.

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    41.   The storage medium as claimed in claim 40, wherein the plurality of compression parameters are created based on a distribution of an appearing frequency for each word within said

35    original file.


    42.   The storage medium as claimed in

claim 40, wherein the compressed file further
includes non-compressed section data of a certain
section and a non-compression flag which indicates
that the certain section is non-compressed, and said
5   expanding process means causes the. computer. to
suppress expansion of the certain section when the
non-compression flag indicates a non-compressed
state. of the section. data of the certain. section .
read from the recording medium by said reading
10  process section.

43.   The storage medium as claimed in
claim 40, wherein identification information of the
compression parameters is included in control
15  information of each section.

44.   The storage medium as claimed in
claim 40, wherein a delete flag which indicates that
end information indicating an.end of each section is
20  not added to the section data is included in control
information of each section, and said reading
process means causes the computer to control reading
of the section data .by judging a last section. based.
on the delete flag.
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45.   The storage medium as claimed in
claim 40, wherein said expanding process means
causes the computer to carry out expansion by a
driver software for the recording medium, said
30  driver software being used for making access to the
recording medium.

46.   The recording medium as claimed in
claim 45, wherein the driver software for the
35  recording medium is independent of an application
software of the computer.

47. A storage medium which stores
computer-readable information, and stores a program
comprising:

reading process means for causing a computer to
5    control an access to a recording medium which stores
a plurality of compression parameters and a
compressed file in response to a read request from
an application software, an original file being
divided into a plurality of sections and compressed
10   for each section using the plurality of compression
parameters so as to obtain a plurality of section
data forming the compressed file; and

expanding process means for causing the
computer to expand the section data read from the
15   recording medium by said reading process section
using the compression parameters corresponding to
the section data, and supply expanded data to the
application software.

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